

City Council Meeting

1

Water and Wastewater Rate Adjustments

November 18, 2015



Presentation Outline

2

- Introduction
- Why We Are Here
- Critical Infrastructure
- Financial Plans
- Rate Adjustment Program Process
- Zonal Charges
- Rate Adjustments Recommendation
- 2015 Water and Wastewater Rate Study
- Recommendations
- Next Steps

Priorities and Goals – Why?

3

- ❑ Maintaining Public Health and Safety
 - Fight Fires and Protect Property
 - Provide Safe, Clean Drinking Water
 - Prevent Sewage Overflows and Spills by Addressing Aging Infrastructure
 - Maintain Reliable and Dependable Water and Wastewater Systems



Priorities and Goals – How?

4

- Maintaining Reliable, Safe Water and Wastewater Systems
 - ▣ Robust preventative maintenance program
 - ▣ Rigorous water sampling program
- Continuing to Address Aging and Deteriorating Water and Wastewater Systems
 - ▣ Proactive capital replacement program
- Being Good Stewards of Water Supply with Conservation
 - ▣ Enhanced public outreach
 - ▣ Implemented advanced leak detection technology
- Balancing Financial and Environmental Sustainability
 - ▣ Continue to contain O&M costs



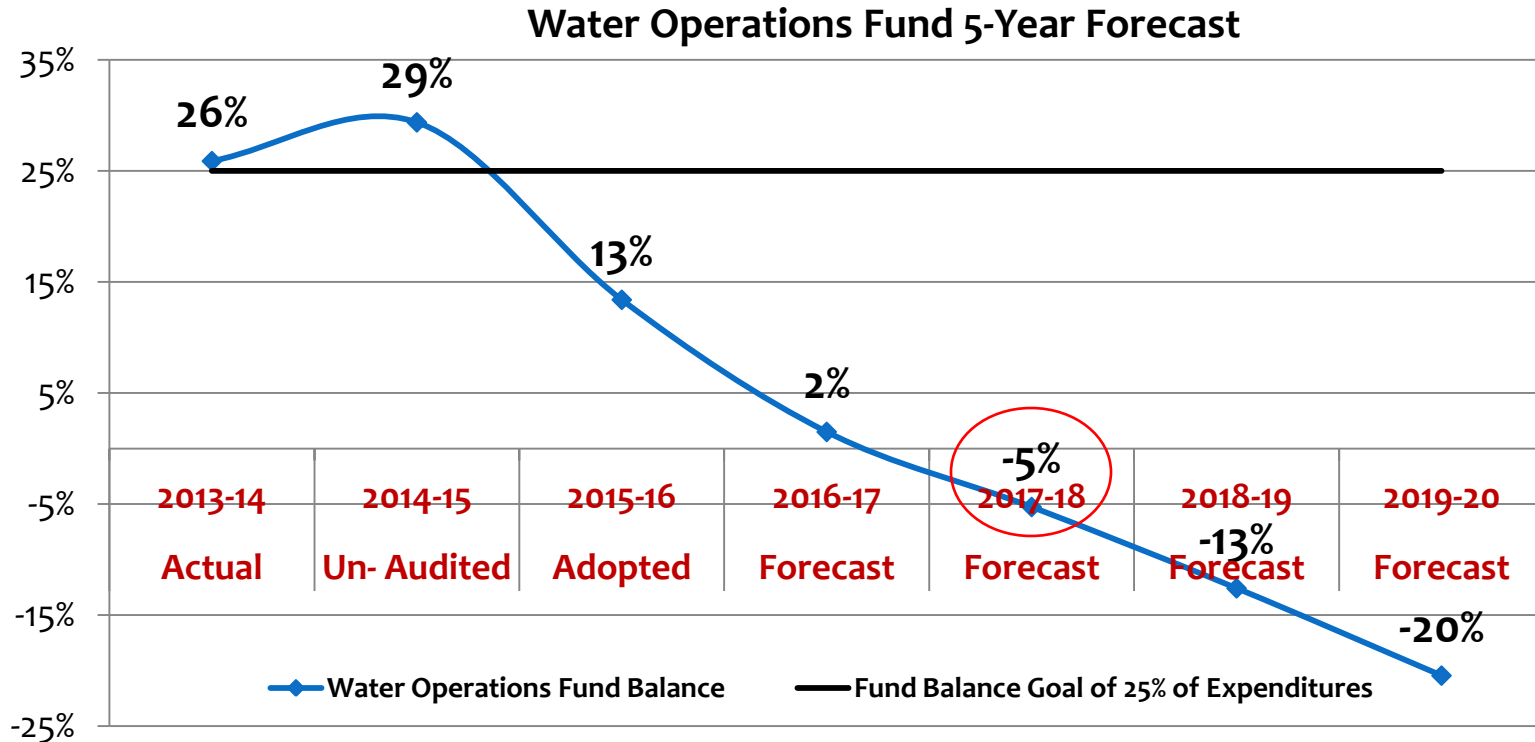
Essential Infrastructure

5

- Water and Wastewater Infrastructure – \$200 million assets
- Operational 24/7 to ensure public health and safety
- Daily O&M is essential
 - ▣ To provide safe and reliable water and wastewater service
 - ▣ To meet Community expectations
 - ▣ To comply with regulatory requirements
- Capital investment plan to address aging infrastructure
- Debt Financing
 - ▣ Requirement to meet debt coverage covenants
 - ▣ Need to maintain strong credit rating for future system improvements

Financial Plan – Fund Balance

6



- Current revenue model heavily dependent on consumption while majority of costs are fixed

Primary Cost Increases

7

	2016	2017	2018	2019	2020
Changes in Annual Total Operating Expenditures		\$126,733	\$658,082	\$324,268	\$305,109
Main Contributors:					
Water Purchase		\$131,384	\$487,102	\$135,853	\$143,003
Personnel		\$39,287	\$82,624	\$88,459	\$89,226
Power		\$22,800	\$19,484	\$28,189	-

Proactive Steps Taken to Reduce Costs

8

- Council savings initiative from bonds refinancing
 - ▣ Water in 2014 – \$1.5 million savings
 - ▣ Wastewater in 2015 – \$1.0 million savings
- Council pension cost-sharing leadership
 - ▣ Future City increases split 50/50 with employees
- Cut \$200,000 in expenditures from Water Operations in FY 15-16 after budget was adopted
- Postponed hiring of vacant top level manager position for 18 months

Public Information and Outreach on Water System Financial Issues

9

- Adopted FY15 and Adopted FY16 budgets identified water financial issues
- City Council Goal Setting Retreat – January 2015
- Comprehensive Water Workshop – April 1, 2015
- Water's New Normal Workshop – May 20, 2015
- Two Council Workshops – October 21 and November 4

* All information broadly distributed through City communication channels

Rate Adjustment Program Process

10

- NBS Comprehensive Water and Wastewater Rate Study
- Two Council Workshops (October 21 and November 4)
 - ▣ Utilities rate program
 - ▣ Future conservation
 - ▣ Aligning fixed/variable revenues and expenses
 - ▣ Subsidy for low-income residents
 - ▣ Zonal elevation surcharges
 - ▣ Pass-through provision
 - ▣ Rate structures
- Rate Study Findings and Recommendations

Rate Structure Design

11

- Distribute cost of service fairly and equitably
- Meet debt coverage covenants with bond holders
- Ensure the integrity of critical public health and safety assets
- Balance Environmental and Financial Considerations
 - Aligning Fixed/Variable Revenues with Costs
 - Current Revenues 20%/80%, Current Costs 70%/30%
 - Recommending a revenue model of 50%/50%
 - Shift from tiered to uniform rate structure

Rate Adjustments Recommendation – Revenue Adjustments

12

☐ Proposed Water Revenue Adjustments

Alternative 1

	<u>1/1/16</u>	<u>4/1/16</u>	<u>1/1/17</u>	<u>1/1/18</u>	<u>1/1/19</u>	<u>1/1/20</u>
<i>Annual Rate Revenue Increase</i>	6.25%	9.00%	7.25%	7.25%	7.25%	7.25%

☐ Alternative 2 (Recommended)

	<u>1/1/16</u>	<u>4/1/16</u>	<u>1/1/17</u>	<u>1/1/18</u>	<u>1/1/19</u>	<u>1/1/20</u>
<i>Annual Rate Revenue Increase</i>	<u>0.00%</u>	16.00%	7.25%	7.25%	7.25%	7.25%

☐ Proposed Wastewater Revenue Adjustments (Recommended):

	<u>1/1/16</u>	<u>4/1/16</u>	<u>1/1/17</u>	<u>1/1/18</u>	<u>1/1/19</u>	<u>1/1/20</u>
<i>Annual Rate Revenue Increase</i>	0.00%	0.00%	1.00%	1.00%	1.00%	1.00%

Rate Adjustments Recommendation – Low-income Subsidy

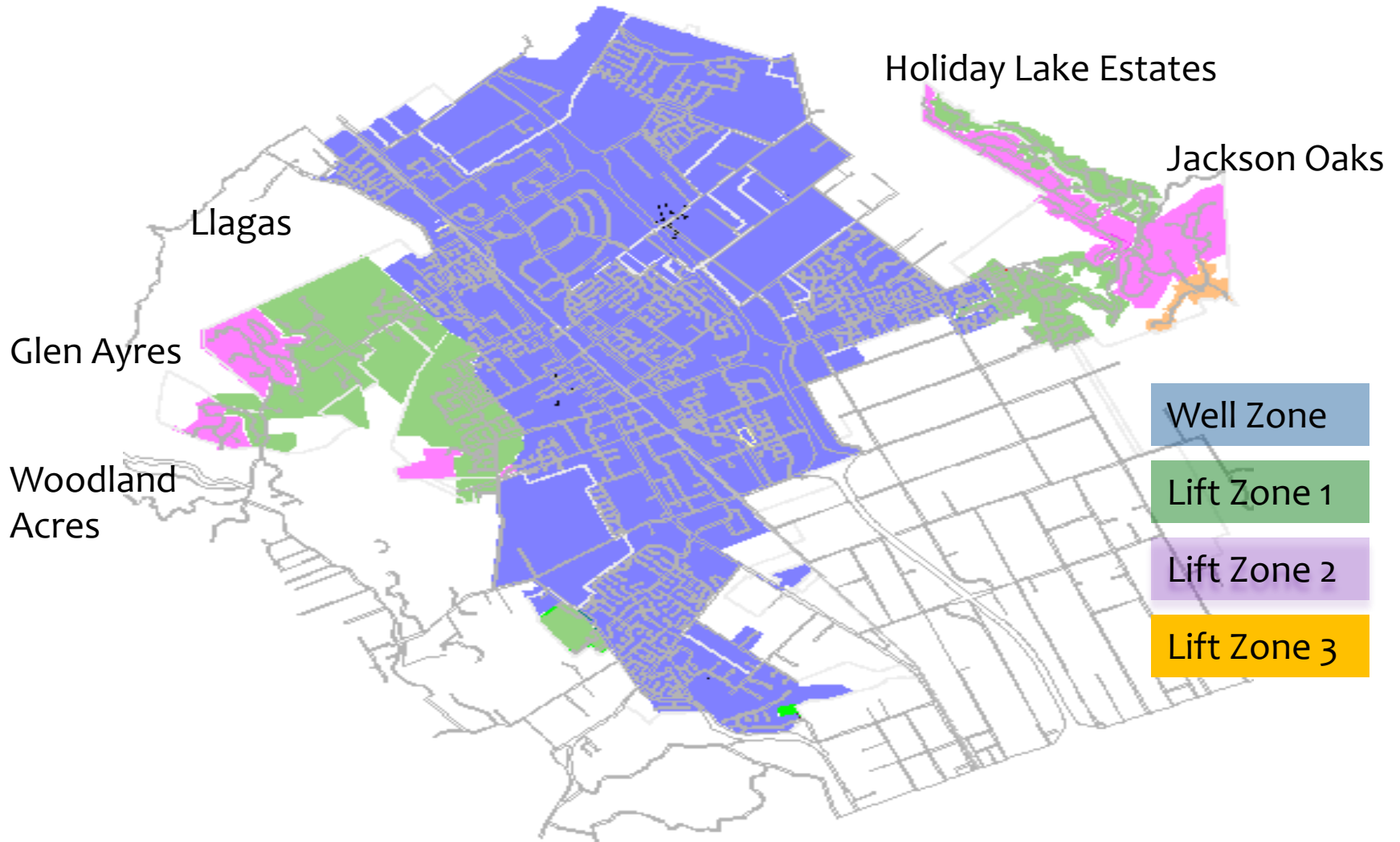
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	<i>Current Subsidy Amount</i>	<i>4/1/16</i>	<i>1/1/17</i>	<i>1/1/18</i>	<i>1/1/19</i>	<i>1/1/20</i>
<i>Increase in Subsidy (%)</i>		<i>10%</i>	<i>10%</i>	<i>10%</i>	<i>10%</i>	<i>10%</i>
<i>Water</i>	<i>\$3.63</i>	<i>\$3.99</i>	<i>\$4.39</i>	<i>\$4.83</i>	<i>\$5.31</i>	<i>\$5.85</i>
<i>Wastewater</i>	<i>\$7.60</i>	<i>\$8.36</i>	<i>\$9.20</i>	<i>\$10.12</i>	<i>\$11.13</i>	<i>\$12.24</i>

- To continue long term Council tradition
- Paid for by lease revenues, not subsidized by rate payers

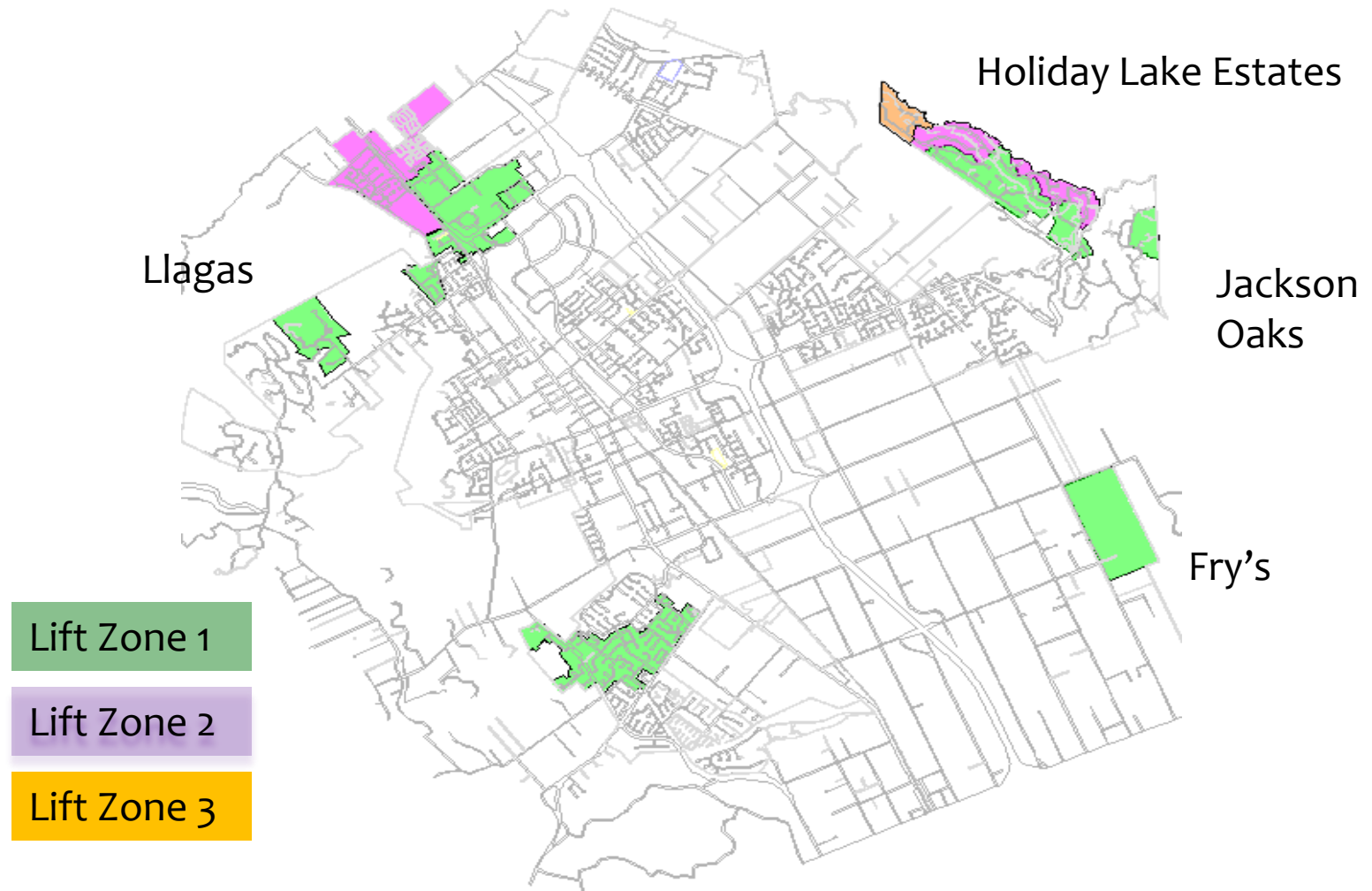
Water Lift Zones

14



Wastewater Zones Map

15



2015 Water and Wastewater Rate Study

16

- Update on Water and Wastewater Rate Study
 - Presentation by Kim Boehler, Associate Director, NBS



City of Morgan Hill

Update on Water & Wastewater Rate Study

City Council Presentation

November 18, 2015

Presented by

Kim Boehler, Associate Director, NBS

Overview of Presentation

- **Overview of Key Rate Study Tasks**
- **Water Rate Study**
 - ✓ Overview of Financial Plan
 - ✓ Rates for Financial Plan Alternatives
 - ✓ Bill Comparisons
 - ✓ Zonal Elevation Charges
- **Wastewater Rate Study**
 - ✓ Overview of Financial Plan
 - ✓ Proposed Rates
 - ✓ Bill Comparisons
 - ✓ Zonal Elevation Charges
- **Recommended Next Steps**

Water Rate Study

Financial Plan Alternatives

Water Utility Financial Plan – Alternative #1

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget	Projected			
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Sources of Water Funds					
Rate Revenue Under Prevailing Rates	\$ 7,329,555	\$ 7,476,146	\$ 8,703,075	\$ 8,877,136	\$ 9,054,679
Non-Rate Revenues	1,111,704	939,388	923,229	948,840	962,224
Interest Earnings	47,138	3,182	3,451	6,223	16,070
Total Sources of Funds	\$ 8,488,396	\$ 8,418,715	\$ 9,629,755	\$ 9,832,199	\$10,032,973
Uses of Water Funds					
Operating Expenses	\$ 8,924,651	\$ 9,051,571	\$ 9,709,848	\$10,034,316	\$10,339,632
Debt Service	939,538	945,549	944,774	943,336	944,184
Rate-Funded Capital Expenses	-	-	419,639	1,109,361	1,148,410
Total Use of Funds	\$ 9,864,189	\$ 9,997,120	\$11,074,261	\$12,087,013	\$12,432,227
Surplus (Deficiency) before Rate Increase	\$ (1,375,793)	\$ (1,578,405)	\$ (1,444,506)	\$ (2,254,814)	\$ (2,399,254)
Additional Revenue from Rate Increases	404,271	1,496,029	2,498,782	3,377,134	4,350,880
Surplus (Deficiency) after Rate Increase	\$ (971,522)	\$ (82,376)	\$ 1,054,276	\$ 1,122,320	\$ 1,951,627
Projected Annual Rate Increase ¹	9.00%	7.25%	7.25%	7.25%	7.25%
Cumulative Rate Increases	15.81%	24.21%	33.21%	42.87%	53.23%
Net Revenue Requirement ²	\$ 8,705,347	\$ 9,054,551	\$10,147,581	\$11,131,951	\$11,453,933

1. FY 2015/16 increase is effective on April 1, 2016. All subsequent rate increases are effective on January 1st of each year.

2. Total Use of Funds less non-rate revenues and interest earnings. This is the annual amount needed from water rates.

Assumes the previously approved and adopted 6.25% increase is implemented on January 1, 2016.

Water Utility Financial Plan – Alternative #2

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget	Projected			
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Sources of Water Funds					
Rate Revenue Under Prevailing Rates	\$ 7,329,555	\$ 7,476,146	\$ 8,703,075	\$ 8,877,136	\$ 9,054,679
Non-Rate Revenues	1,111,704	939,388	923,229	948,840	962,224
Interest Earnings	47,138	2,904	2,967	5,827	15,622
Total Sources of Funds	\$ 8,488,396	\$ 8,418,437	\$ 9,629,271	\$ 9,831,803	\$10,032,525
Uses of Water Funds					
Operating Expenses	\$ 8,924,651	\$ 9,051,571	\$ 9,709,848	\$10,034,316	\$10,339,632
Debt Service	939,538	945,549	944,774	943,336	944,184
Rate-Funded Capital Expenses	-	-	419,639	1,109,361	1,148,410
Total Use of Funds	\$ 9,864,189	\$ 9,997,120	\$11,074,261	\$12,087,013	\$12,432,227
Surplus (Deficiency) before Rate Increase	\$ (1,375,793)	\$ (1,578,683)	\$ (1,444,990)	\$ (2,255,210)	\$ (2,399,702)
Additional Revenue from Rate Increases	293,182	1,510,555	2,516,917	3,396,974	4,372,584
Surplus (Deficiency) after Rate Increase	\$ (1,082,611)	\$ (68,128)	\$ 1,071,927	\$ 1,141,764	\$ 1,972,882
Projected Annual Rate Increase¹	16.00%	7.25%	7.25%	7.25%	7.25%
Cumulative Rate Increases	16.00%	24.41%	33.43%	43.10%	53.48%
Net Revenue Requirement²	\$ 8,705,347	\$ 9,054,829	\$10,148,065	\$11,132,347	\$11,454,381

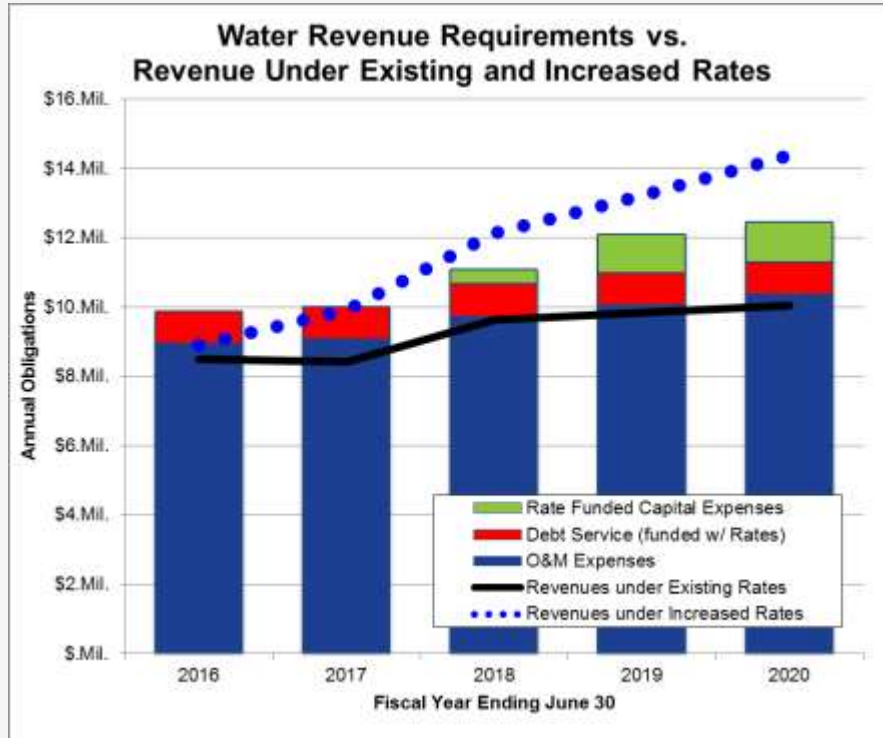
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2. Total Use of Funds less non-rate revenues and interest earnings. This is the annual amount needed from water rates.

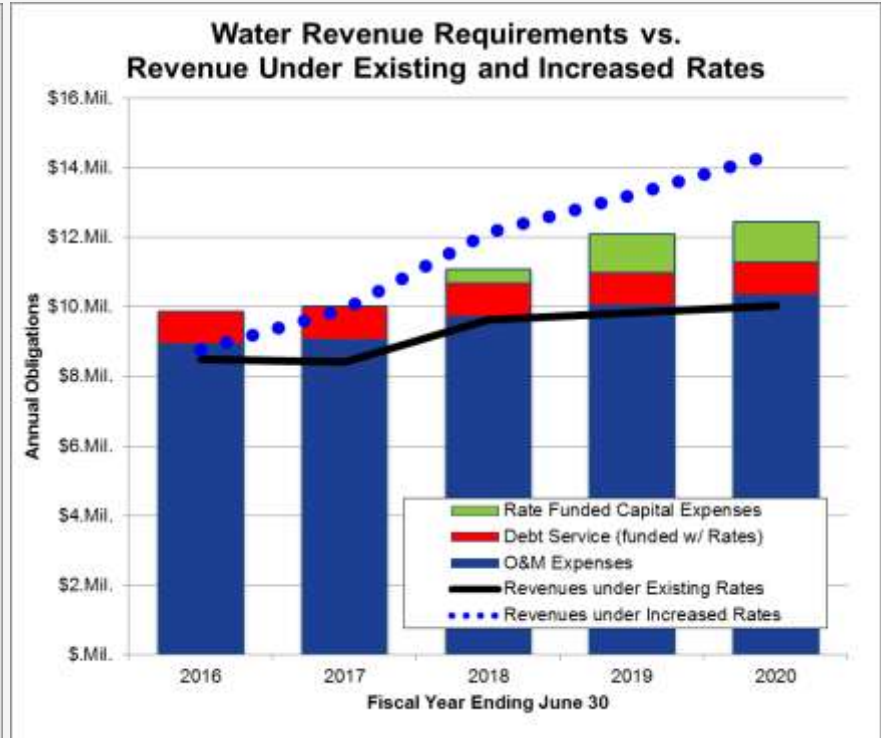
Assumes one rate increase is adopted on April 1, 2016 (the 6.25% increase will not be implemented).

Water Utility Financial Plan, cont.

Alternative #1

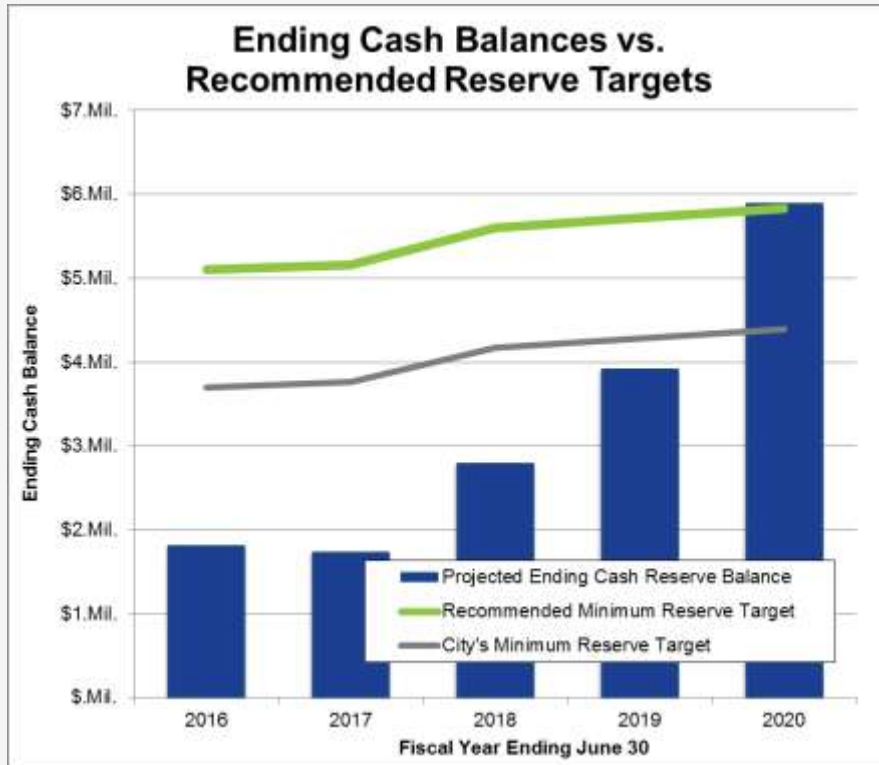


Alternative #2

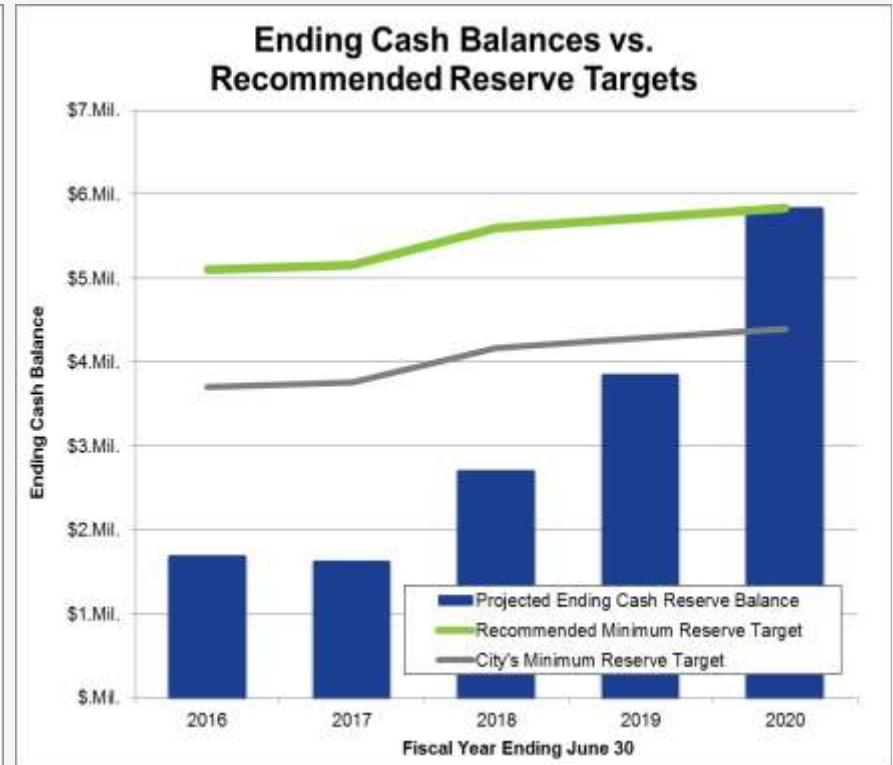


Water Utility Financial Plan, contd.

Alternative #1



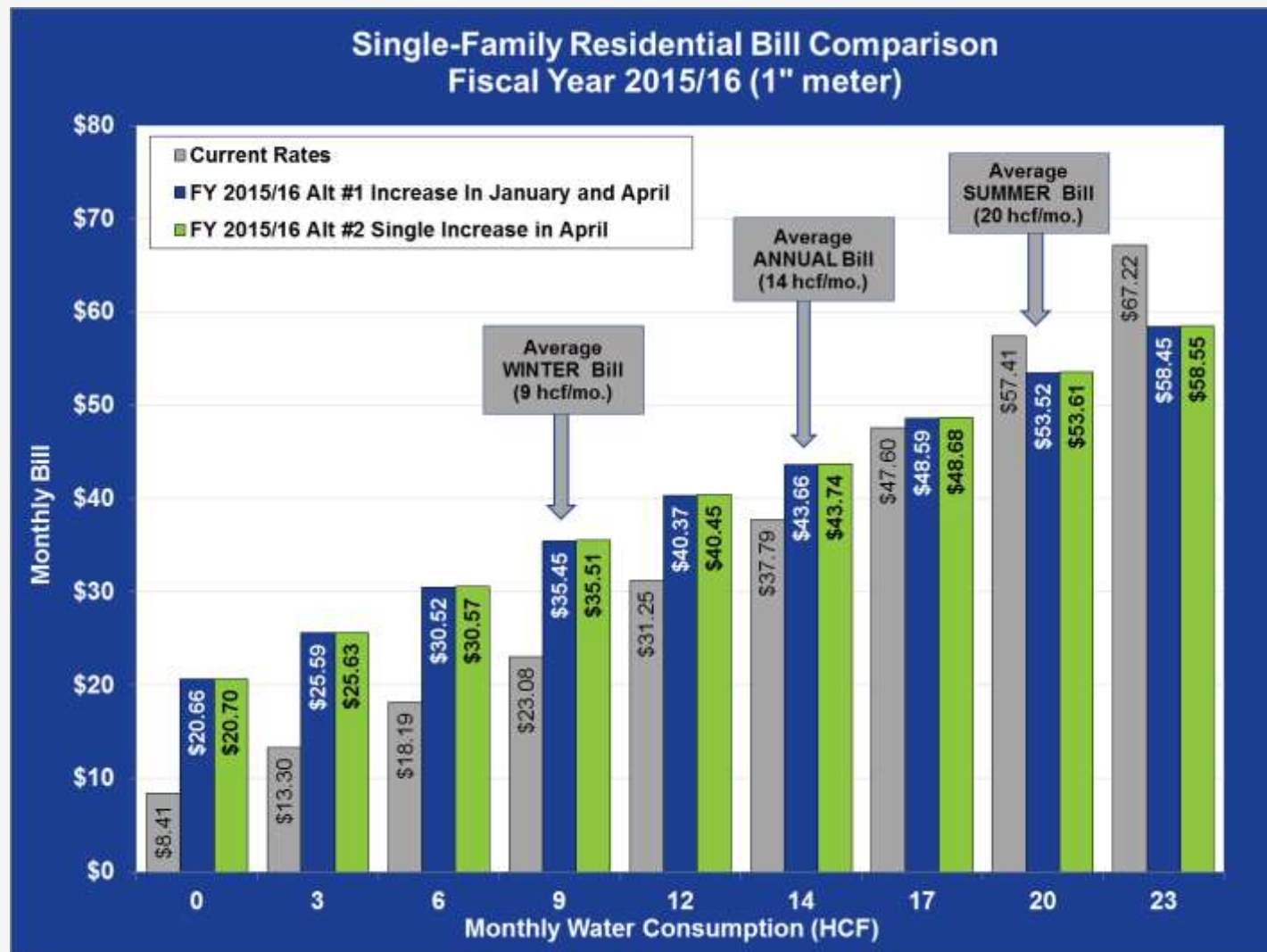
Alternative #2



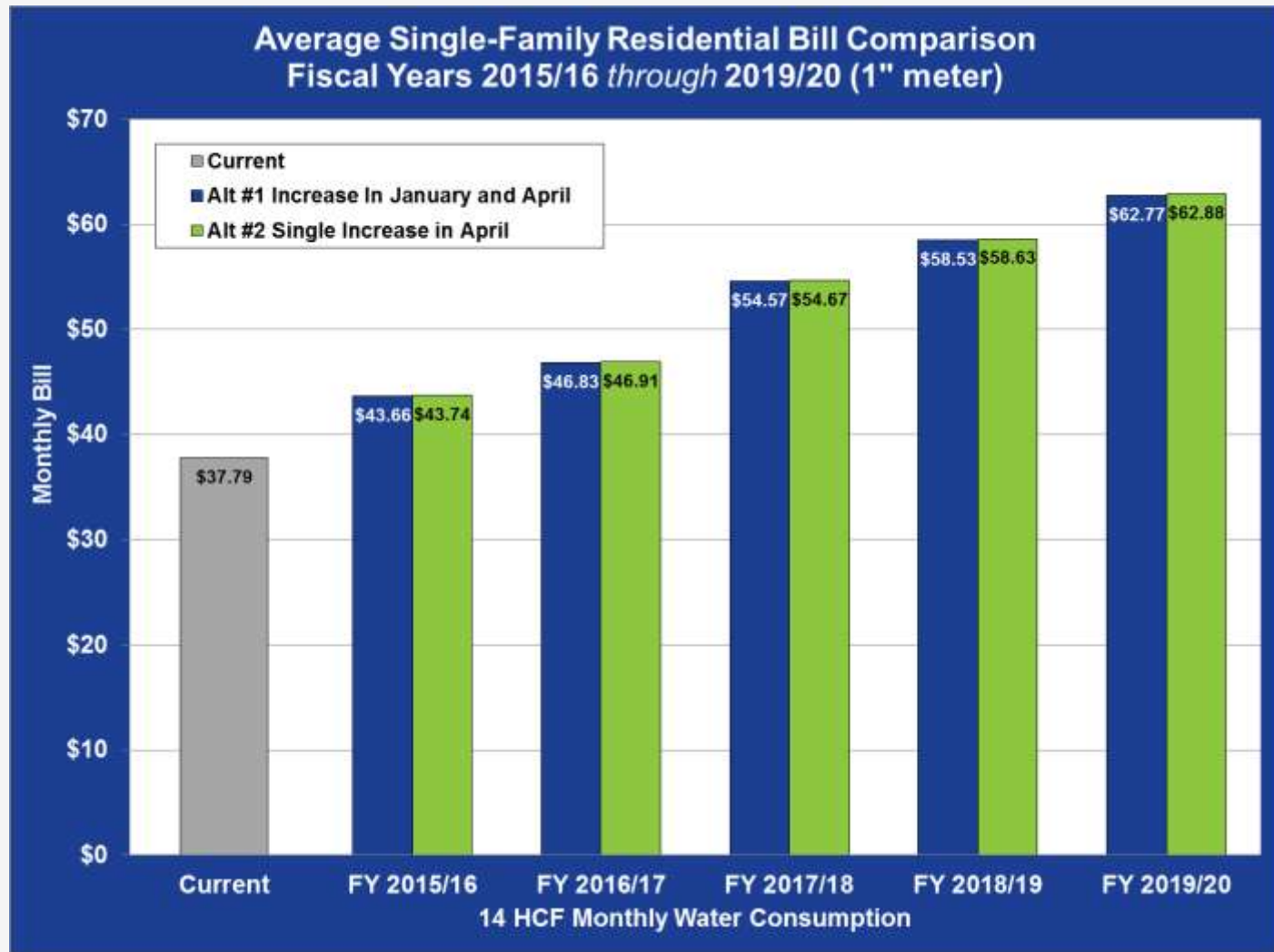
Water Rate Study

Bill Comparisons

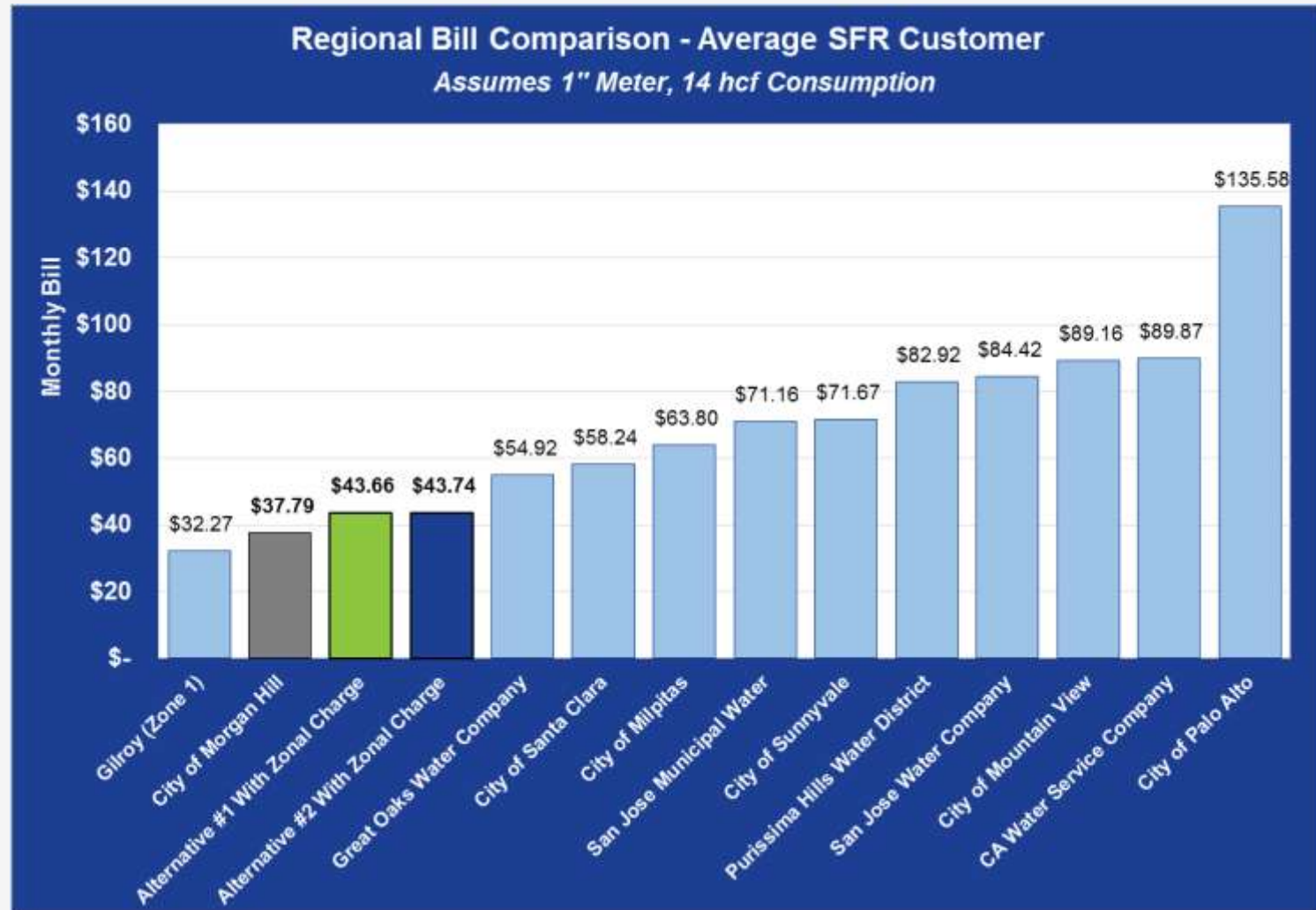
Water Bill Comparisons – Single Family



Water Bills – 5 Years, Single Family



Water Bill Comparisons – Regional Comps



Water Rate Study

Zonal Elevation Charges

Water Zonal Elevation Costs

Water Enterprise Calculation of Zonal Elevation Surcharges					
		Surcharge Costs			
Elevation Zones	Number of Customers	Annual Maintenance Costs	Annual Replacement of Facility Cost	Annual Power Costs	Total Plant Cost*
Zone 1 Lift Stations	2,630	\$ 265,000	\$ 139,350	\$ 127,020	\$ 531,370
Zone 2 Lift Stations	701	\$ 180,000	\$ 82,500	\$ 47,650	\$ 310,150
Zone 3 Lift Stations	115	\$ 55,000	\$ 21,429	\$ 6,100	\$ 82,529
Total	3,446	\$ 500,000	\$ 243,279	\$ 180,770	\$ 924,049

**Total Plant Cost includes annual Power/Maint. Costs plus annual replacement costs based on a straight-line depreciation cost.*

Water Zonal Elevation Charges

Strictly Volumetric Charges:

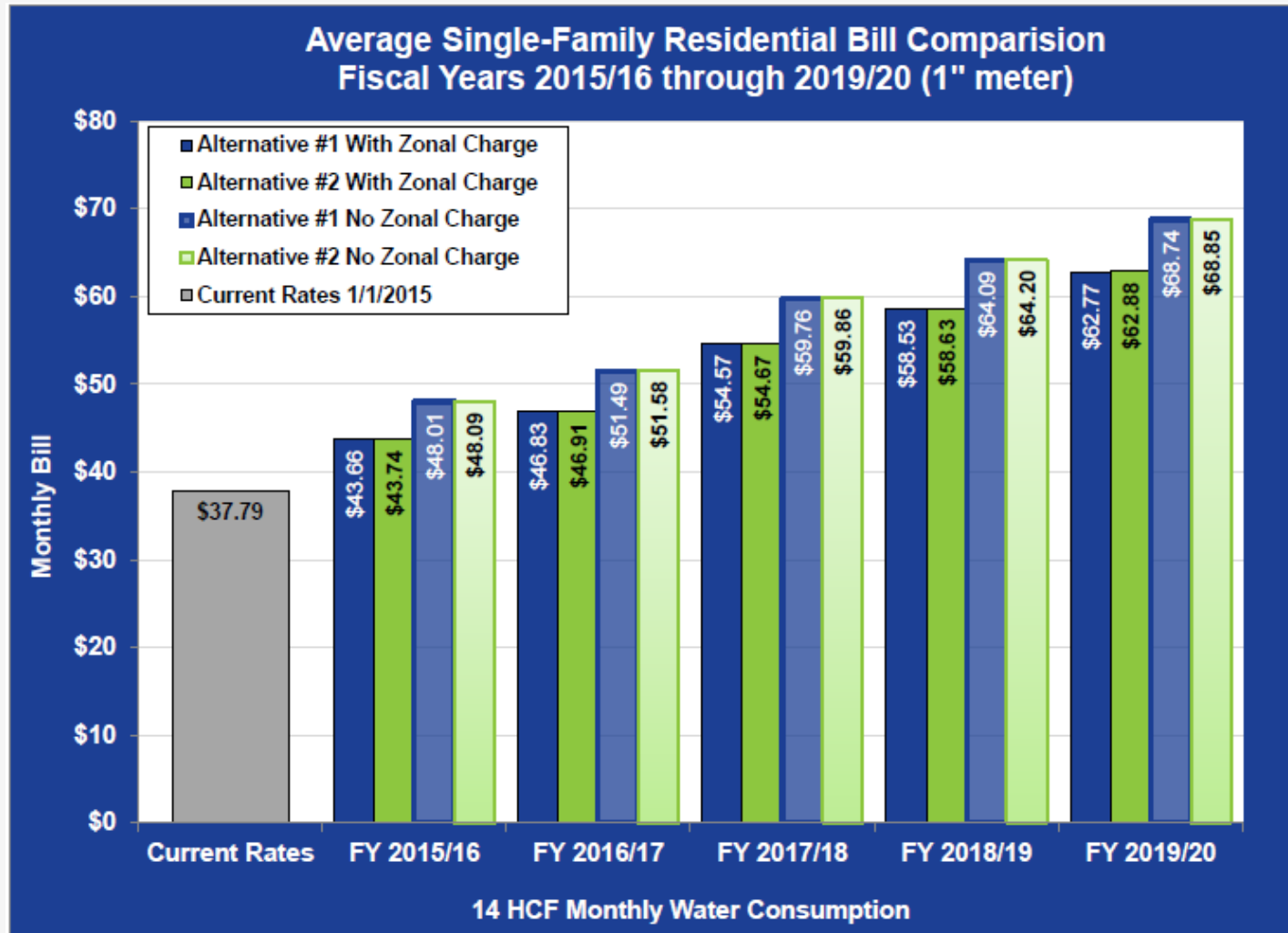
Water Enterprise Zonal Elevation Surcharges: Alternative #1 - Volumetric Surcharges (\$/hcf)					
Elevation Zones	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
	% Increase ¹	4.4%	4.4%	4.4%	4.4%
Zone 1	\$0.57	\$0.60	\$0.62	\$0.65	\$0.68
Zone 2	\$2.06	\$2.15	\$2.25	\$2.35	\$2.45
Zone 3	\$5.49	\$5.73	\$5.99	\$6.25	\$6.53

Combination of Fixed and Volumetric Charges:

Water Enterprise Zonal Elevation Surcharges: Alternative #2 - Fixed and Volumetric Surcharges					
Elevation Zones	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
	% Increase ¹	4.4%	4.4%	4.4%	4.4%
Fixed Monthly Surcharges (\$/customer)					
Zone 1	\$9.78	\$10.21	\$10.66	\$11.13	\$11.63
Zone 2	\$36.59	\$38.20	\$39.89	\$41.65	\$43.50
Zone 3	\$91.97	\$96.03	\$100.27	\$104.71	\$109.34
Volumetric Surcharges (\$/hcf)					
Zone 1	\$0.14	\$0.14	\$0.15	\$0.16	\$0.16
Zone 2	\$0.37	\$0.38	\$0.40	\$0.42	\$0.43
Zone 3	\$0.62	\$0.65	\$0.67	\$0.70	\$0.74

1. the Annual % increase is due to cost inflation applied to zone-specific costs.

Average SFR Water Bill – with / without Zonal Charges



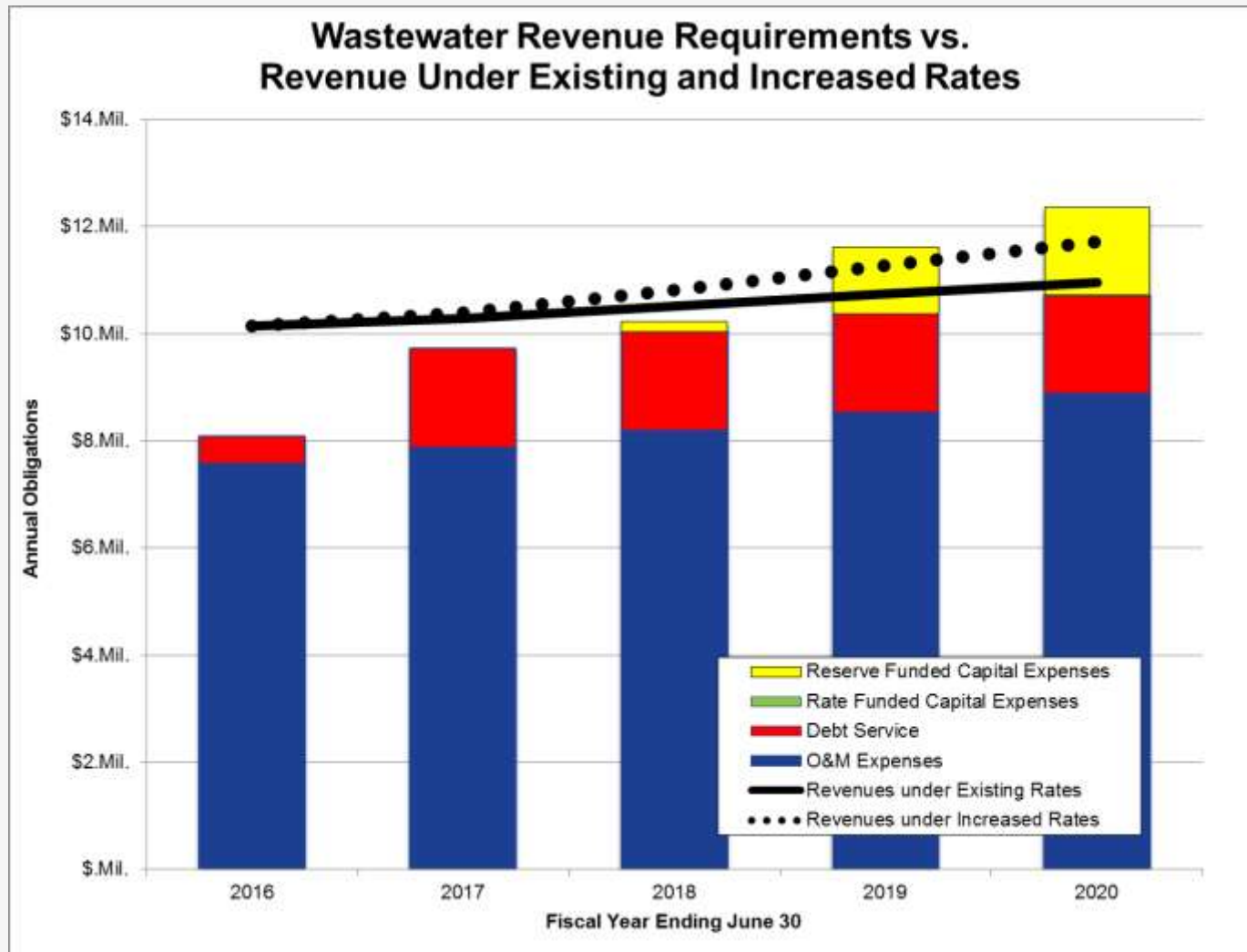
Wastewater Rate Study

Recommended Financial Plan

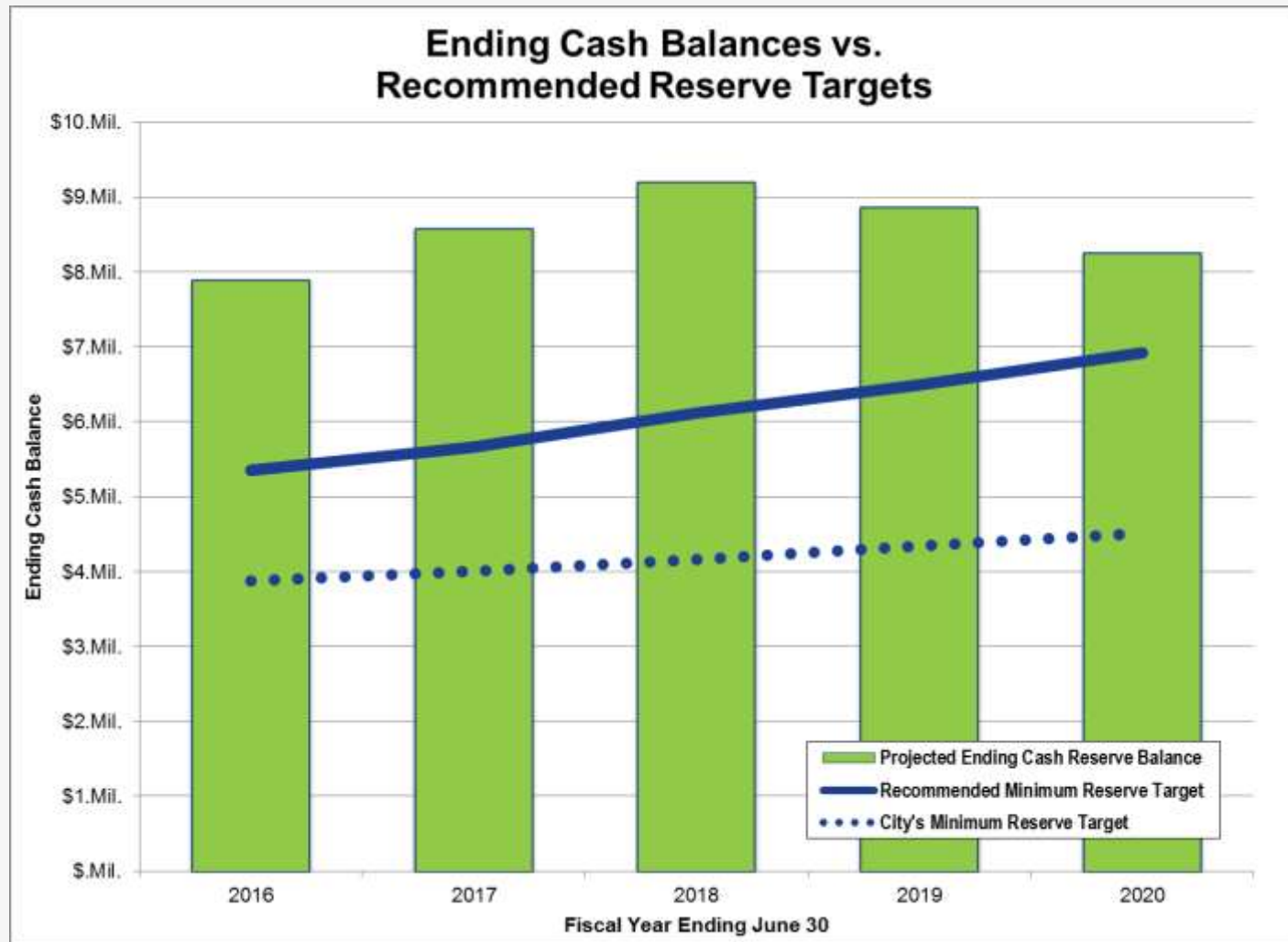
Wastewater Utility Financial Plan

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget	Projected			
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Sources of Wastewater Funds					
Rate Revenue Under Prevailing Rates	\$ 9,921,864	\$ 10,090,078	\$ 10,291,890	\$ 10,497,718	\$ 10,707,672
Other Operating Revenue	175,843	179,543	183,354	187,280	191,323
Interest Earnings	41,394	15,959	33,834	52,214	47,051
Total Sources of Funds	\$ 10,139,100	\$ 10,285,581	\$ 10,509,068	\$ 10,737,211	\$ 10,946,046
Uses of Wastewater Funds					
Operating Expenses	\$ 7,566,286	\$ 7,861,132	\$ 8,180,753	\$ 8,517,079	\$ 8,862,574
Debt Service	\$ 502,299	\$ 1,841,791	\$ 1,845,120	\$ 1,844,478	\$ 1,844,003
Total Uses of Funds	\$ 8,068,585	\$ 9,702,923	\$ 10,025,873	\$ 10,361,557	\$ 10,706,577
plus: Revenue from Rate Increases ⁴	-	50,450	154,893	264,548	379,614
Surplus (Deficiency) before Rate Increase	\$ 2,070,516	\$ 633,108	\$ 638,088	\$ 640,202	\$ 619,082
Net Revenue Requirement	\$ 7,851,348	\$ 9,507,421	\$ 9,808,685	\$ 10,122,064	\$ 10,468,203
Total Rate Revenue After Rate Increases	\$ 9,921,864	\$ 10,140,529	\$ 10,446,773	\$ 10,762,265	\$ 11,087,286
Projected Annual Rate Revenue Increase	0.00%	1.00%	1.00%	1.00%	1.00%
Cumulative Increase from Annual Revenue Increases	0.00%	1.00%	2.01%	3.03%	4.06%

Wastewater Utility Financial Plan, cont.



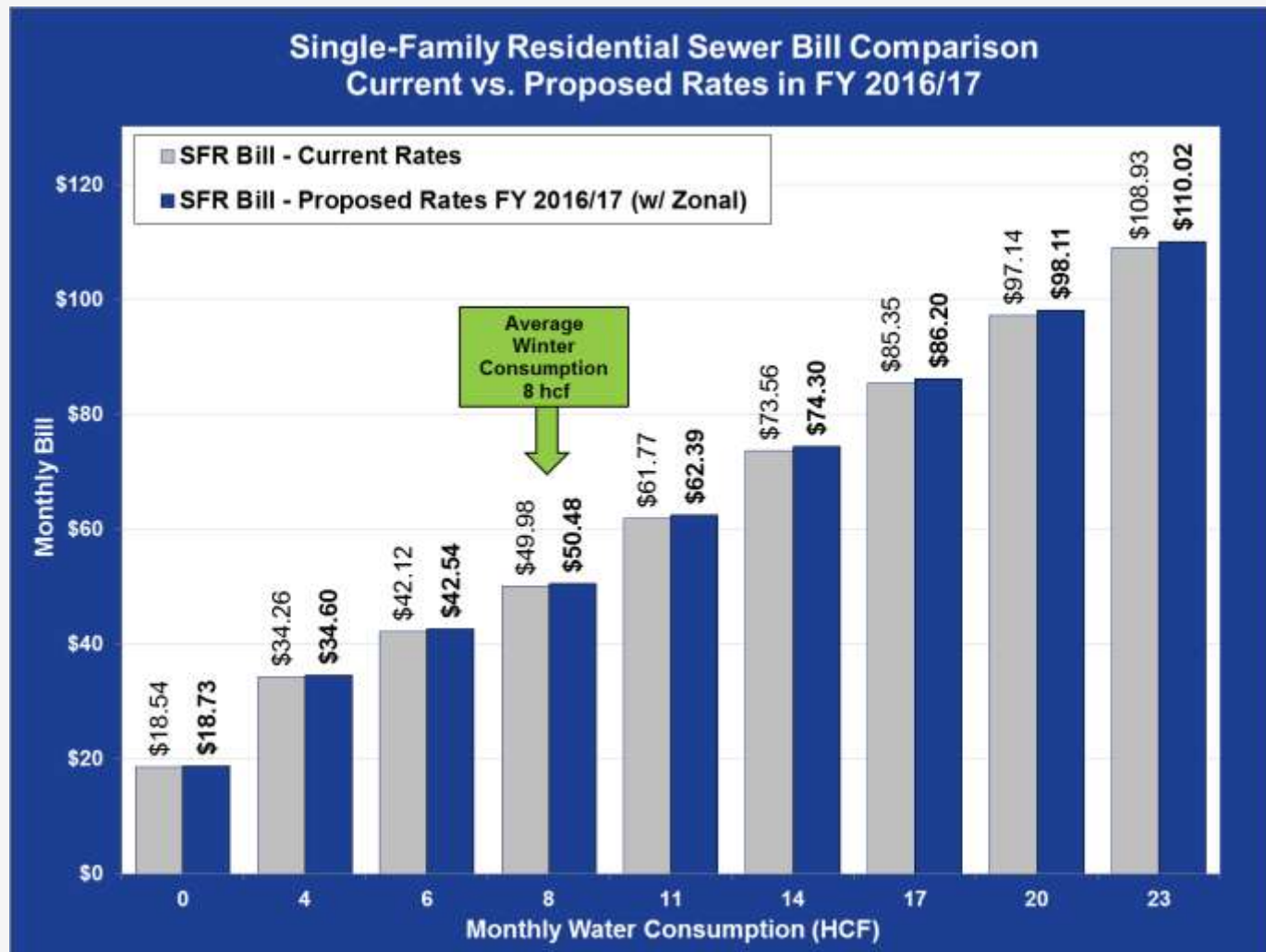
Wastewater Utility Financial Plan, contd.



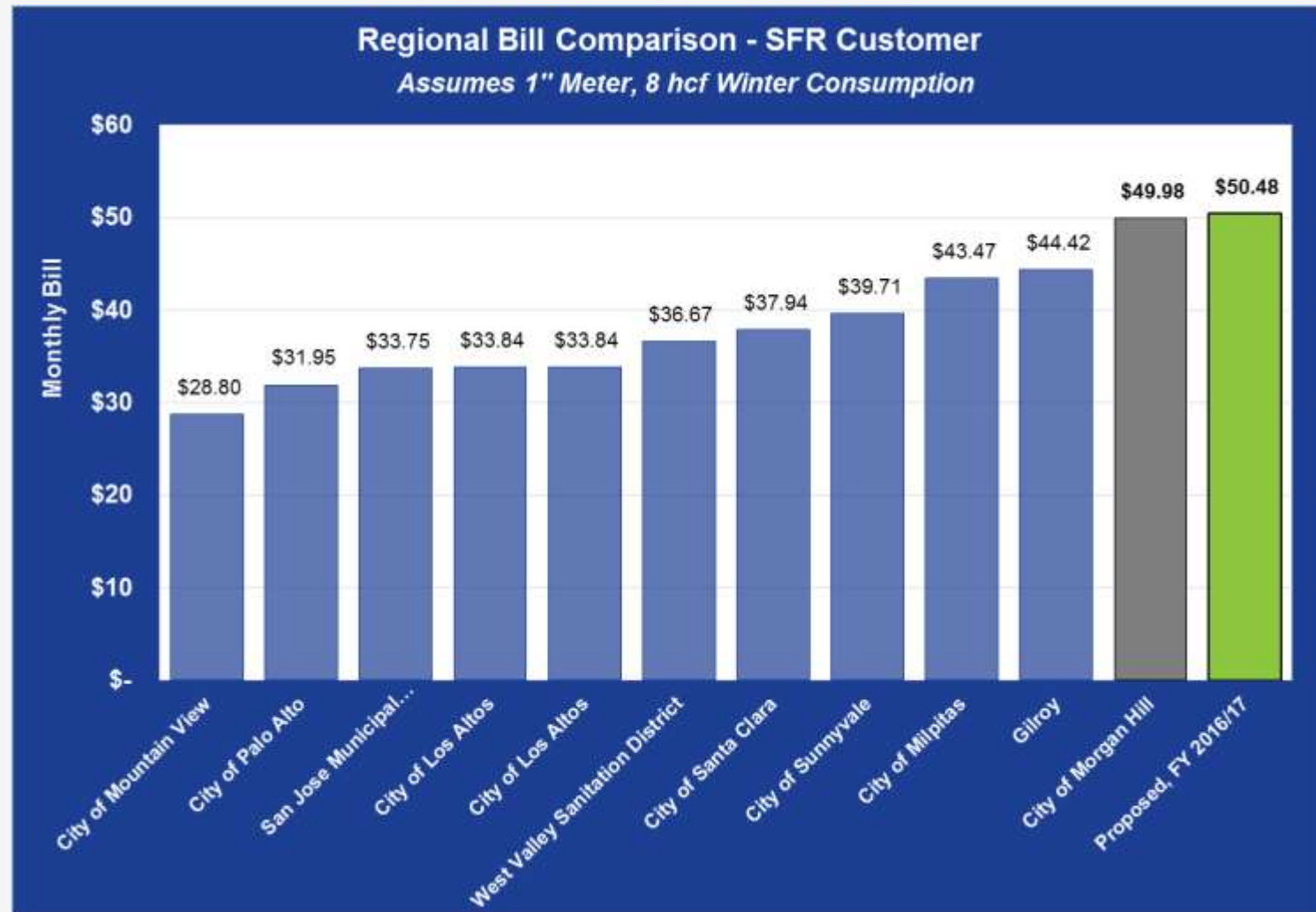
Wastewater Rate Study

Bill Comparisons

Wastewater Bills – Single Family



Wastewater Bills – Regional Comps



Wastewater Zonal Elevation Costs

Wastewater Enterprise Calculation of Zonal Elevation Surcharges - Volumetric Surcharges					
		Surcharge Costs			
Elevation Zones	Number of Customers	Annual Power Costs	Annual Maintenance Costs	Annual Replacement of Facility Cost	Total Plant Cost*
Zone 1 Lift Stations	1,476	\$ 18,100	\$ 150,000	\$ 125,000	\$ 293,100
Zone 2 Lift Stations	515	\$ 6,500	\$ 45,000	\$ 43,125	\$ 94,625
Zone 3 Lift Stations	80	\$ 4,500	\$ 15,000	\$ 13,125	\$ 32,625
Total	2,071	\$ 29,100	\$ 210,000	\$ 181,250	\$ 420,350

**Total Plant Cost includes annual Power/Maint. Costs plus annual replacement costs based on a straight-line depreciation cost.*

Wastewater Zonal Elevation Charges

Strictly Volumetric Charges:

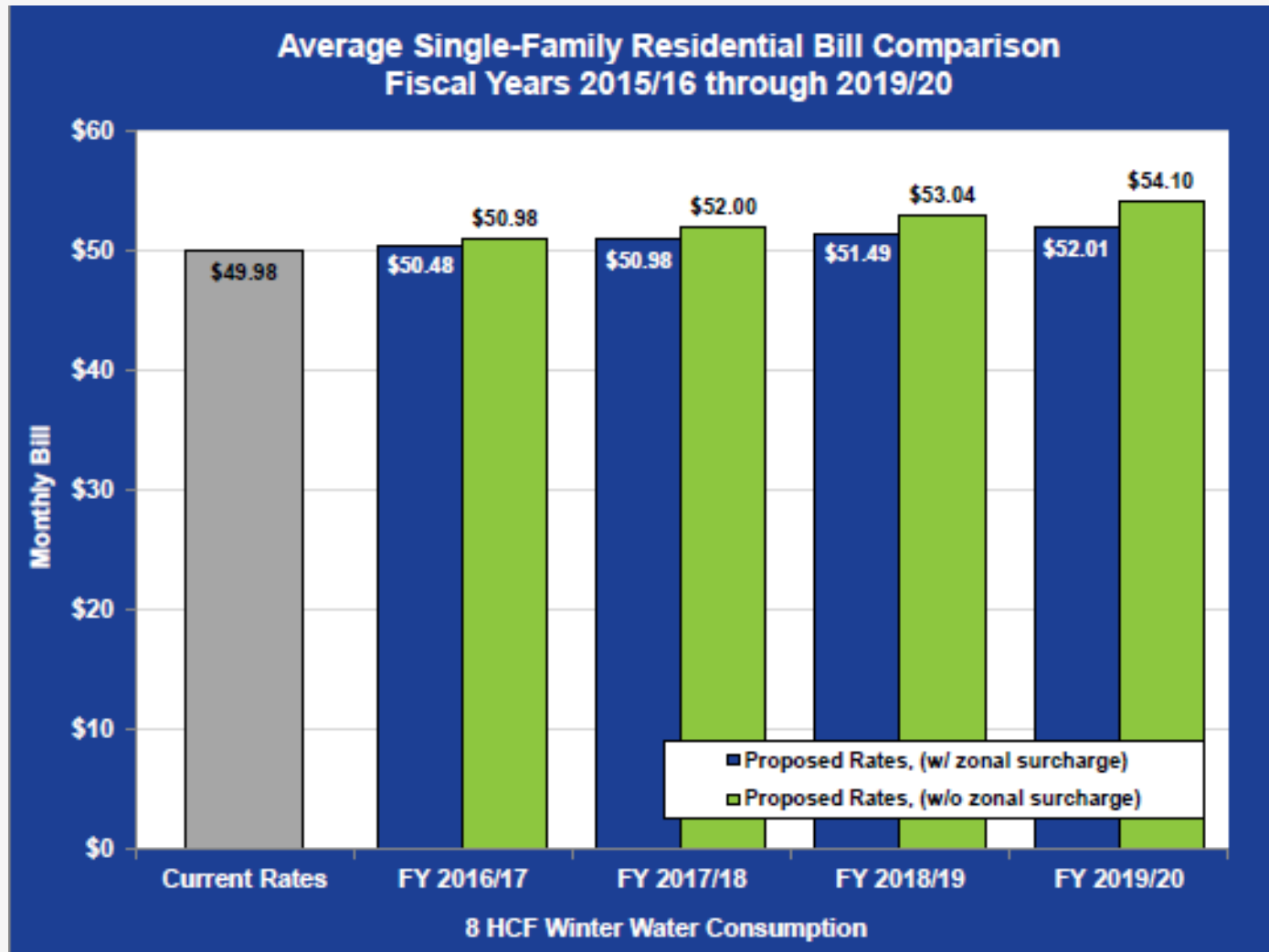
Wastewater Enterprise Zonal Elevation Surcharges: Alternative #1 - Volumetric Surcharges (\$/hcf)					
Elevation Zones	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
	% Increase ¹	4.3%	4.3%	4.3%	4.3%
Zone 1	\$2.66	\$2.77	\$2.89	\$3.02	\$3.15
Zone 2	\$5.20	\$5.42	\$5.66	\$5.90	\$6.15
Zone 3	\$10.31	\$10.75	\$11.21	\$11.70	\$12.20

Combination of Fixed and Volumetric Charges:

Wastewater Enterprise Zonal Elevation Surcharges: Alternative #2 - Fixed and Volumetric Surcharges					
Elevation Zones	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
	% Increase ¹	4.3%	4.3%	4.3%	4.3%
Fixed Monthly Surcharges (\$/customer)					
Zone 1	\$11.07	\$11.54	\$12.04	\$12.55	\$13.10
Zone 2	\$23.41	\$24.41	\$25.46	\$26.56	\$27.70
Zone 3	\$52.70	\$54.97	\$57.33	\$59.80	\$62.37
Volumetric Surcharges (\$/hcf)					
Zone 1	\$0.16	\$0.17	\$0.18	\$0.19	\$0.19
Zone 2	\$0.34	\$0.35	\$0.37	\$0.38	\$0.40
Zone 3	\$1.04	\$1.09	\$1.14	\$1.18	\$1.24

1. the Annual % increase is due to cost inflation applied to zone-specific charges.

Average SFR Wastewater Bill – with / without Zonal Charges



Recommendation – Zonal Charges

Average SFR Utility Bill, With Zonal Charges

	<i>Current</i>	<i>4/1/16</i>	<i>1/1/17</i>	<i>1/1/18</i>	<i>1/1/19</i>	<i>1/1/20</i>
<i>Monthly Water Bill</i>	\$ 37.79	\$43.74	\$46.91	\$54.67	\$58.63	\$62.88
<i>Monthly Wastewater Bill</i>	\$ 49.98	\$49.98	\$50.48	\$50.98	\$51.49	\$52.01
<i>Total Monthly Bill</i>	\$ 87.77	\$93.72	\$97.39	\$105.65	\$110.12	\$114.89
<i>Total Bill Percent Increase</i>		6.78%	3.92%	8.48%	4.23%	4.33%

Recommendations

1. Accept a 2015 Draft Water and Wastewater Rate Study
2. Provide Direction to the Administration on Water Rate implementation
3. Adopt a resolution in connection with the consideration of implementation of new Water Rates to:
 - a. Set January 20, 2016 as a date for a Public Hearing, and
 - b. Authorize the Mailing of Proposition 218 Notices
4. Adopt a resolution in connection with the consideration of implementation of new Wastewater Rates to:
 - a. Set January 20, 2016 as a date for a Public Hearing, and
 - b. Authorize the Mailing of Proposition 218 Notices

Next Steps

Action	2015			2016		
	October	November	December	January	February	March
Workshop #1	10/21 ◆					
Workshop #2		11/4 ◆				
Accept Rate Study		Tonight ★				
Prop 218 Protest Period			12/5/15 – 1/20/16			
Public Hearing				1/20 ◆		
Adopt Rates				1/27 ◆		
New Rates Effective						3/28 ◆

- Community Priorities Survey is being performed
- Results on community's priority for public health and safety in our water and sewer systems should be available prior to January 20 Public Hearing